

**In the Claims**

Please cancel claims 16, 22, 23, 30 and 45 and amend claims 24, 31, 37 and 46 as follows.

1-15. (Previously Cancelled)

16. (Cancelled)

17- 21. (Previously Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Currently amended)     ~~The system of claim 23~~ A system for optimization of database access in a database network comprising:

(a) at least one client;

(b) at least one database server; and

(c) a database network router for managing data flow between said at least one client and said at least one database server, wherein said database network router includes:

(i) a client access module for communicating with said at least one client,  
and

(ii) a database resource manager for communicating with said at least one database server;

whereby said database network router may be used to optimize access to said at least one database server by said at least one client,

25. (Previously presented)     The system of claim 24, wherein said client access module and said database resource manager share a common software interface for said communicating.

26. (Previously presented) The system of claim 25, wherein said software interface comprises a protocol manager for handling multiple database protocols.

27. (Previously presented) The system of claim 24, further comprising:

- (iii) local data storage, wherein said database resource manager stores local data.

28. (Previously presented) The system of claim 27, wherein said local data is chosen from the group consisting of commonly used data objects, results of parsed query statements, non-optimized query statements, alternatives for said non-optimized query statements, user defined objects and performance statistics.

29. (Previously presented) The system of claim 24, wherein a portion of said database resource manager is installed as a database server agent.

30. (Cancelled)

31. (Currently amended) ~~The method of claim 30,~~ A method for optimization of database access in a database network comprising the steps of:

- (a) providing a database network router; and
- (b) using said database network router for managing data flow between at least one client and at least one database server in the database network, wherein the step of using said database network router includes:

- (i) receiving at least one client communication,
- (ii) sending said at least one client communication to said at least one database server, and
- (iii) in response to said at least one client communication, receiving at least one database communication and sending said at least one database communication to said at least one client.

32. (Previously presented) The method of claim 31, wherein said at least one client communication is selected from the group consisting of database queries and updates

and wherein said at least one database communication is selected from the group consisting of database responses and data.

33. (Previously presented) The method of claim 31, wherein the step of using said database network router further includes,

- (iv) prior to said receiving, assigning a priority to each said at least one client communication, and
- (v) performing (i)-(iii) according to said priority.

34. (Previously presented) The method of claim 31, wherein the step of using said database network router further includes, prior to said assigning:

- (vi) identifying said at least one client, and
- (vii) receiving status information selected from the group consisting of a load of said at least one database server, a time of day of said assigning, a day of week of said assigning, a service level of said at least one client, and a status of at least one communications line between said at least one client and said at least one database server.

35. (Previously presented) The method of claim 31, wherein said at least one client communication includes a query and wherein the step of using said database network router further includes, prior to said sending, at least one action selected from the group consisting of analyzing said query, modifying said query, checking a cost estimate of said query, parsing said query and storing said query in a local storage.

36. (Previously presented) The method of claim 35, wherein said modifying of said query includes blocking of said query, and wherein said at least one database communication includes an error message.

37. (Currently amended) The method of claim ~~30~~ 31, wherein the step of using said database network router includes:

- (i) receiving a log-out and disconnect request from a first client that is initially connected to one of said at least one database server by a database connection, and

- (ii) reporting said log-out to said one database server while leaving said database connection available for a second client

38. (Previously presented) The method of claim 37, wherein the step of using said database network router further includes:

- (iii) receiving a log-in and connection request from said second client;
- (iv) reporting said log-in to said database server; and
- (v) using said database connection for said second client.

39. (Previously presented) The method of claim 38, wherein the step of using said database network router further includes: prior to said reporting:

- (vi) responding to said first client log-out and disconnect request with a message confirming log-out and disconnect.

40. (Previously presented) The method of claim 38, wherein the step of using said database network router includes:

- (i) sending at least one query to one of the database servers; and
- (ii) monitoring a processing of said at least one query by said one database server, said monitoring including receiving information, regarding said at least one query, selected from the group consisting of a CPU time of said database server, a response time of said database server, a read/write load of said database server and an execution load of said database server.

41. (Previously presented) The method of claim 40, wherein the step of using said database network router further includes: (iii) subsequent to said receiving, storing said queries in a log of popular non-optimized queries.

42. (Previously presented) The method of claim 41, wherein the step of using said database network router further includes: (iv) reading said queries from said log.

43. (Previously presented) The method of claim 42, wherein the step of using said database network router further includes: (v) analyzing and testing said queries.

44. (Previously presented) The method of claim 43, wherein the step of using said database network router further includes: (vi) building optimized alternatives for said queries.

45. (Cancelled) .

46. (Currently amended) ~~The method of claim 45~~ A method of load balancing in a database network that includes a plurality of database servers, comprising the steps of:

(a) providing a database network router;  
(b) detecting a failed one of the database servers; and  
(c) using said database network router for transferring connections of said failed database server to at least one other server, wherein the step of using said database network router includes:

- (i) monitoring said failed database server for a recovery thereof, and
- (ii) transferring at least one new connection to said failed database after said recovery.